

Group II, Claims 40, 41, and 72 to 77, drawn to a method for conducting plural ECL determinations on a sample;
Group III, Claims 42 to 49, drawn to an article intended for conducting ECL determinations;
Group IV, Claims 50 to 57 and 67, drawn to a cassette for conducting ECL determinations;
Group V, Claims 58 and 59, drawn to a method of making binding domains;
Group VI, Claims 60 and 68 to 71, drawn to a method of detecting or measuring analytes in a sample;
Group VII, Claims 61 to 65, drawn to a kit for conducting ECL assays; and
Group VIII, Claims 78 and 79, drawn to a system for conducting ECL determinations.

In response to the restriction requirement, Applicants provisionally elect Group I, claims 1 to 39 and 66, drawn to an apparatus for conducting electrochemiluminescence (ECL) assays.

This election is made with traverse and is made without prejudice to Applicants' right to file divisional applications directed to the non-elected subject matter.

Applicants respectfully request that the restriction requirement be favorably reconsidered and withdrawn or alternatively, that the restriction requirement be restructured to include a group which includes all the claims of groups I, IV, and VIII or a group that includes the claims directed to an apparatus, an article, or a kit for conducting ECL determinations, e.g. the claims of Groups I, II, III, IV, VII, and VIII.

The Office Action states that the subject matter of Groups I to VIII are distinct inventions which have acquired

separate status in the art and which support separate patents. In particular, the Examiner has taken the position that the subject matter of Groups I, III, IV, VII and VIII are distinct inventions which are not connected in design, operation or effect and which support separate patents. The Office Action also asserts that the inventions of Groups I, III, IV, V, VII, or VIII are distinct from the inventions of Groups II or VI and are related as product and process of use. It is stated that the apparatus, cassette, article, kit or system can be used in a mutually materially different process such as determining ECL of a given sample as compared to Group II or in methods of measuring analytes in a sample as compared to Group VI.

Applicants respectfully assert that the restriction requirement should be reconsidered and withdrawn. The Examiner's attention is respectfully invited to MPEP § 803 which provides two criteria that must be satisfied in order to substantiate a proper restriction of the claims of an application. First, it must be shown that the application claims independent or distinct inventions, as required by both 35 U.S.C. §121 and the PTO rules. Second, it must be shown that examining all the claimed inventions in a single application would constitute a serious burden on the Examiner.

Applicants respectfully assert that neither of these criteria are met in the instant application. First, it is

submitted that separate and distinct inventions are not present and that a restriction of the invention is not appropriate. All the claims of this invention (claims 1 to 79) are directed to a patterned multi-array, multi-specific surface (PMAMS) for electrochemiluminescence-based tests and for methods of making and using the PMAMS. More specifically, the claims cover:

cassettes for conducting ECL reactions and assays comprising a plurality of discrete binding domains immobilized on a support;

apparatus for measuring electrochemiluminescence of a sample that provides support or cassette handling means;

kits comprising components including cassettes for simultaneously measuring a plurality of electrochemiluminescence reactions;

electrodes prepared from graphitic nanotubes often as part of the cassette; and

methods for using the cassettes for measuring electrochemiluminescence in a sample.

The subject matter of the claims are overlapping and are directed to one inventive concept. It is thus submitted that claims 1 to 79 should be prosecuted in a single application.

Second, it is respectfully asserted that there is no serious burden imposed on the Examiner or the PTO to allow

examination of all the claims in the same application. In view of the fact that the present claims (claims 1-79) are all related to the same subject matter and are not patentably distinct, it is submitted that a search of the prior art when examining the claims of Group I, would, at the same time, result in a search of prior art for use in examining all the remaining claims of the application. It would seem then that to require the filing of separate divisional applications directed to the Group II, III, IV, V, VI, VII and VIII claims would result in the same search being repeated, but at a later date. It is submitted that this duplicate search would be quite inefficient to the operation of the Patent and Trademark Office. It would therefore be most beneficial for both efficiency and cost savings to the Applicants as well as the PTO for this case to proceed without restriction.

Moreover, as a result of the recently enacted GATT legislation limiting the term of a patent to twenty years from its effective filing date, the delay in the examination of the non-elected claims will likely result in the patent term for these claims being unnecessarily shortened.

Accordingly, Applicants respectfully submit that all the claims of this invention (claims 1-79) are related to the same inventive concept and that the criteria for restriction outlined in the MPEP has not been satisfied. In view of these

comments, reconsideration and withdrawal of the restriction requirement are respectfully requested.

Nonetheless, if the restriction is maintained, Applicants alternatively request that the restriction requirement be modified to include the claims of Groups I, IV and VIII in one group to be prosecuted in the same application or preferably to include the claims of Groups I, III, IV, VII and VIII in one group to be prosecuted in one application.

The claims of Group I are drawn to an apparatus for conducting ECL assays comprising an electrode and a counter-electrode classified in Class 422 and subclass 52 and 58. The claims of Group IV are directed to a cassette for conducting ECL determinations comprising a plurality of discrete binding domains on a support and one or more pairs of electrodes or counter-electrodes classified in Class 422, subclass 52 and 98. Similarly, the claims of Group VIII are drawn to a system for conducting ECL determinations containing a plurality of binding domains specific for a plurality of different analytes, a voltage waveform generator, and a photon detection means, classified in Class 422, subclass 52.

The claims of Group I, IV and VIII are related and are not directed to separable and distinct inventions. Further, the claims of these three groups have identical class and subclass classifications. Applicants therefore urge that the restriction

between Groups I, IV, and VIII is unwarranted and should be withdrawn.

In support of Applicants position that the claims of Groups I, IV and VIII should not be restricted, one from the other, Applicant emphasize that as a practical matter, a proper search of the invention of Group I would necessarily overlap with a search made for the Group IV and Group VIII claims as they are all in the same class and subclass. Thus, if the restriction requirement is adhered to, a search conducted for to the elected Group I invention would be repeated when the divisional applications are filed for the Group IV and Group VIII claims. Separating these claims into different applications would therefore lead to inefficiencies and redundancies on the part of the PTO as well as on the Applicants. Given the co-extensive nature of the search required, it would be most beneficial for both efficiency and cost savings to the Applicants as well as the PTO, for the restriction require to be withdrawn or at least modified so that one group encompasses the Classes of Group I, IV and VIII.

Moreover, it is likely that the same Examiner will be in charge of the divisional applications, but since the divisional applications will be examined at a much later date, the Examiner will have to conduct a duplicate redundant search. If a different Examiner is assigned to the divisional

applications, a significant loss of PTO efficiency would be incurred as a result of the examination of that divisional case.

Further, it is asserted that the restriction requirement places an undue burden upon Applicants as well as the PTO. The restriction requirement means that Applicants must file, prosecute, and ultimately pay for the prosecution and maintenance of a number of patent applications. The only logical outcome of the restriction requirement between the claims of Groups I, IV and VIII is delay in the examination of the claims, resulting in inefficiencies and unnecessary expenditures by Applicant.

Therefore, since a single search can be performed for the claims of Groups I, VI and VIII in the same class and subclass without any significant burden on the Examiner or the PTO, and in the interest of efficiency and consistent patent prosecution on the part of the U.S. PTO and the Applicants, it is respectfully requested the restriction requirement be modified to include Groups I, IV and VIII in the same application.

Applicants also respectfully assert that the claims of Group III and VII are not patentably distinct from the invention claimed in Groups I, IV and VIII and that the restriction of those claims is also unwarranted. The claims of Group III are drawn to an article comprising a plurality of discrete binding domains on a support for conducting electrochemiluminescent

determinations in Class 422, subclass 102. The claims of Group VII are drawn to a lot for conducting ECL assays in Class 422, subclass 61. The claims of Groups I, IV, VIII, III and VII are all directed to the same invention, i.e., articles for multi-array, multi-specific electrochemiluminescence testing and are all classified in Class 422. Therefore it is respectfully submitted that the claims of Groups I, III, IV, VII and VIII should not be restricted, one from the other.

Furthermore, while it is maintained in the Office Action that the method claims of Groups II, V, and VI are related to the other claims as a process of using making and a product made, Applicants respectfully submit that examination with respect to the process claims would necessarily encompass the same prior art as would be appropriate to be apparatus claims. Therefore, given the essentially co-extensive nature of the search required, it would be most beneficial for Groups II, V, and VI to be examined with the remaining claims in the application.

In view of the foregoing, it is respectfully requested that the restriction requirement as to class 1 to 79 be reconsidered and withdrawn. Alternately, it is respectfully requested that the restriction requirement be modified so that,